

REMARKS:

Claims 47-48, 50-56, and 58-72 are currently pending in the application.

Claims 1-46, 49, and 57 have been previously canceled without *prejudice*.

Claims 67, 69, and 71 are hereby canceled herewith, without *prejudice*.

Claims 47-48, 50-56, and 58-72 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,861,885 to Strasnick et al. (hereinafter Strasnick '885) in view of U.S. Patent No. 6,665,682 to DeKimpe et al. (hereinafter "DeKimpe '682") and in further view of U.S. Patent No. 6,493,728 to Berger (hereinafter "Berger '728").

Applicants note the Examiner's response of 29 May 2008. Applicants further note with thanks the Examiner's withdrawal of the previous rejections of Claims 55-56, 58-62, and 69-70 under 35 U.S.C. § 101 and the previous rejections of Claims 47-48, 50-54, and 58-72 under 35 U.S.C. § 112.

Applicants respectfully submit that all of Applicants arguments and amendments are without *prejudice* or *disclaimer*. In addition, Applicants have merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. Applicants further respectfully submit that by not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are considered sufficient to overcome the Examiner's rejections. In addition, Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

Are Art Rejections

Pending Claims 47-48, 50-56, and 58-72 stand rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 5,861,885 to Strasnick et al. (hereinafter "Strasnick '885") in view of U.S.

Patent No. 6,665,682 to DeKimpe et al. (hereinafter “DeKimpe ‘682”) further in view of U.S. Patent No. 6,493,728 to Berger (hereinafter “Berger ‘728”).

As discussed in detail below, each of pending Claims 47-48, 50-56, and 58-72 includes elements not disclosed or suggested by the references. Accordingly, Applicants respectfully disagree with all of the above and respectfully traverse the Examiner’s rejection of Claims 47-48, 50-56, and 58-72 under 35 U.S.C. § 103(a) and respectfully request the rejections under 35 U.S.C. § 103(a) be withdrawn.

A. 35 U.S.C. § 103(a) Rejections in view of Strasnick ‘885 in view of DeKimpe ‘682 further in view of Berger ‘728

In rejecting independent Claims 47, 55, and 63 under 35 U.S.C. § 103(a) as anticipated by Strasnick ‘885 in view of DeKimpe ‘682 further in view of Berger ‘728, the Examiner states the following:

Strasnick clearly discloses in Fig. 14 a three-dimensional hierarchy of data structures in which the data objects are navigated and visualized in the three-dimensional layout. Moreover, Strasnick discloses in column 21, lines 30-40 a hierarchical tree structure of nodes in a 3D layout of the nodes/cells or data attributes in a hierarchy wherein the nodes/cells/attributes of the hierarchical tree are distributed/mapped to the coordinates in the 3D space and thus graphical structure has a top layer hierarchy associated with the x-axis in the 3D space, a top layer hierarchy associated with the y-axis in the 3D space and a top layer hierarchy associated with the z-axis in the 3D space (See Figs. 14-18).

Strasnick thus implicitly teaches or strongly suggests the claim limitation of a top layer hierarchy associated with a third axis dimension (See Fig. 10A, 12A and 14-18).

(29 May 2008 Final Office Action, Page 4). Applicants respectfully disagree and respectfully submit that Strasnick ‘885 does not “implicitly teach[] or strongly suggest[],” as asserted by the Examiner, at least the following limitations of Applicants’ independent Claim 47:

a database operable to store hierarchically organized data associated with a multi-dimensional hierarchy of data; and

a multi-dimensional graphical user interface coupled to the database and capable of user interaction to provide a multi-dimensional user interactive graph comprising:

a multi-dimensional axes data hierarchy including a top layer hierarchy associated with a first axis dimension, a top layer hierarchy associated with a second axis dimension, and a top layer hierarchy associated with a third axis dimension;

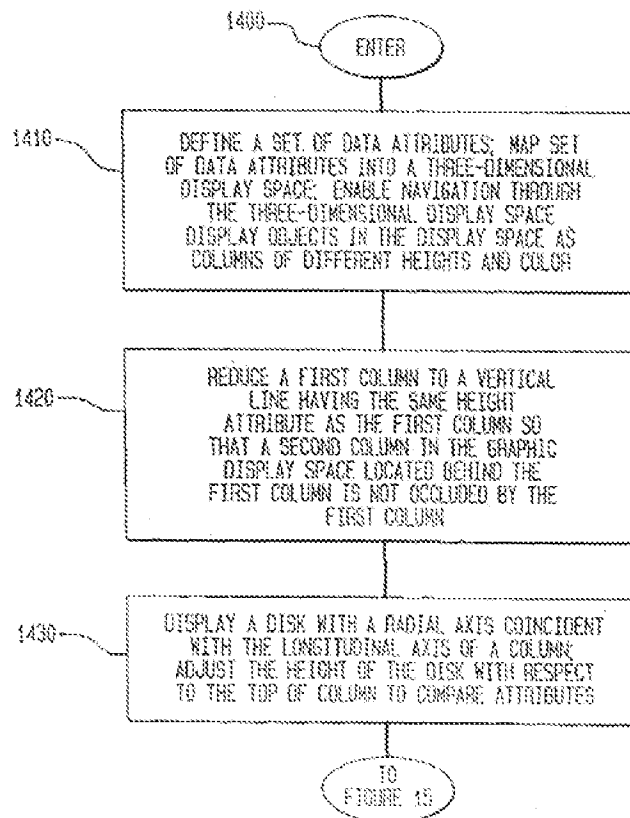
a unique bottom layer hierarchy including a plurality of function values associated with each of the top layer hierarchies of the multi-dimensional axes data hierarchy; and

a first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies of the multi-dimensional axes data hierarchy, the first wall graphical user interface grid perpendicular with the first axis dimension; and

a multi-dimensional value hierarchy associated with each of the function values of the multi-dimensional axes data hierarchy.

Applicants respectfully submit that the difference is clearly seen with reference to Figure 14 of Strasnick '885 as well as to column 2, lines 21-36 of the specification of Strasnick '885 (provided below) upon which the Examiner relies:

FIG. 14



Turning now to FIG. 14, a sequence of preferred operations for a preferred embodiment is illustrated. The present invention is invoked via entry point 1400. In block 1410 the present invention defines a set of data attributes; maps the set of data attributes into a three-dimensional display space; enables navigation through the three-dimensional display space and displays objects in the display space as columns of different heights. In block 1420 the present invention reduces a first column to a vertical line having the same height attribute as the first column so that a second column in the graphic display space located behind the first column is not occluded by the first column. In block 1430 the present invention displays a disk with a radial axis coincident with the longitudinal axis of a column; and adjusts the height of the disk with respect to the top of the column to indicate a comparison between attributes.

(Column 2, lines 21-36). As clearly shown above, Strasnick ‘885 merely describes “defin[ing] a set of data attributes; map[ping] the set of data attributes into a three-dimensional display space; enabl[ing] navigation through the three-dimensional display space and display[ing] objects in the display space as columns of different heights.” (column 22, lines 24-28).

However, defining and mapping a set of data attributes and enabling navigation into a three-dimensional space does not equate to a “***multi-dimensional user interactive graph***” having “a ***multi-dimensional axes data hierarchy*** including a ***top layer hierarchy associated with a first axis dimension, a top layer hierarchy associated with a second axis dimension, and a top layer hierarchy associated with a third axis dimension***” as required by Applicants’ independent Claim 47. Thus, the Examiner’s statement that Strasnick ‘885 “***implicitly teaches or strongly suggests*** the claim limitation of a top layer hierarchy associated with a third axis dimension” is clearly inaccurate. Accordingly, Strasnick ‘885 does not teach, suggest, or even hint at a “***multi-dimensional axes data hierarchy*** including a ***top layer hierarchy associated with a first axis dimension, a top layer hierarchy associated with a second axis dimension, and a top layer hierarchy associated with a third axis dimension***” as recited in Applicants’ independent Claim 47.

Furthermore, Applicants respectfully submit that Strasnick ‘885 does not describe “a unique bottom layer hierarchy including a plurality of function values associated with each of the top layer hierarchies of the multi-dimensional axes data hierarchy” as recited by independent Claim 47. Rather, Strasnick ‘885 discloses a navigation system containing graphical objects and uses the term “axis” in association with the navigation system. (Abstract and Column 1, Lines 40-50). Strasnick

‘885 only uses the term axis to refer to an x axis width and a y axis height of one or more graphical objects in the display such that *a navigator may alter the navigator’s perspective of the information landscape by adjusting the x or horizontal dimension relative to the viewpoint of the navigator*. (Column 16, Lines 33-63). Strasnick ‘885 does not disclose, teach, or suggest a multi-dimensional axes data hierarchy, or even a navigation system that is capable of including a unique bottom layer hierarchy including a plurality of function values associated with each of the top layer hierarchies associated with multiple axis dimensions. Thus, Strasnick ‘885 cannot provide a “*multi-dimensional axes data hierarchy* including a top layer hierarchy associated with *a first axis dimension*, a top layer hierarchy associated with *a second axis dimension*, and a top layer hierarchy associated with *a third axis dimension*” or even a “*unique bottom layer hierarchy including a plurality of function values associated with each of the top layer hierarchies* of the multi-dimensional axes data hierarchy,” since Strasnick ‘885 merely describes, among other things, adjusting the perspective of the information landscape by adjusting the x or horizontal dimension relative to the viewpoint of the navigator.

Additionally, Applicants respectfully submit that DeKimpe ‘682 and Berger ‘728 also fail to disclose the above-referenced limitations. Accordingly, Applicants respectfully request that the rejection of Claims 47-48, 50-56, and 58-72 under 35 U.S.C. § 103 be withdrawn.

II. Office Action Fails to Properly Establish a Prima Facie case of Obviousness over the Proposed Strasnick ‘885 - DeKimpe ‘682 - Berger ‘728 Combination According to the UPSTO Examination Guidelines

Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on the proposed combination of Strasnick ‘885, DeKimpe ‘682, or Berger ‘728, either individually or in combination, and in particular, the Office Action fails to establish a *prima facie* case of obviousness based on the “Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*” (the “Guidelines”).

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc.* (*KSR*), the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is stated in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law

based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.” (*KSR*, 550 U.S. at ___, 82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel “***ensure that the written record includes findings of fact*** concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the “***factual findings made by Office personnel are the necessary underpinnings to establish obviousness.***” (*id.*). Further, “***Office personnel must provide an explanation to support an obviousness rejection*** under 35 U.S.C. 103. (*id.*). In fact, “35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed” and “clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability.” (*id.*).

With respect to the subject application, the Office Action has not shown the ***factual findings necessary to establish obviousness*** or even ***an explanation to support the obviousness rejection*** based on the proposed combination of Strasnick ‘885, DeKimpe ‘682, and Berger ‘728. The Office Action merely states that “it would have been obvious to one of the ordinary skill in the art at the time of invention was made to incorporate DeKimpe or Berger’s multi-dimensional user graphical interface.” (29 May 2008 Final Office Action, Page 24). Applicants respectfully disagree and respectfully submit that the Examiner’s conclusory statement is not sufficient to establish the ***factual findings necessary to establish obviousness*** and is not a sufficient ***explanation to support***

the obviousness rejection based on the proposed combination of Strasnick ‘885, DeKimpe ‘682, and Berger ‘728.

The Guidelines further provide guidance to Office personnel in “determining the scope and content of the prior art” such as, for example, “Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application.” (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be clearly determined by giving the claims the “broadest reasonable interpretation consistent with the specification.” (See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any “*obviousness rejection should include*, either explicitly or implicitly in view of the prior art applied, *an indication of the level of ordinary skill.*” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided *an indication of the level of ordinary skill.*

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that *Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.* (*Id.*). In addition, the Guidelines state that the proper analysis is *whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.* (*Id.* and See 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether Applicants invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to *explain why the difference(s) between the proposed combination of Strasnick ‘885, DeKimpe ‘682, Berger ‘728, and Applicants’ claimed invention would have been obvious to one of ordinary skill in the art.* The Office Action merely states that “because Strasnick’s multi-dimensional data hierarchy and drilling up and down the hierarchical structure and thus suggests drilling up and down multi-dimensional hierarchies including the three-dimensional layout of the hierarchical structures of displayed objects.” (29 May 2008 Final Office Action, Page 24). Applicants respectfully disagree and further respectfully request clarification as to how this statement *explains why the difference(s)*

between the proposed combination of Strasnick '885, DeKimpe '682, Berger '728, and Applicants' claimed invention would have been obvious to one of ordinary skill in the art. Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

The Guidelines yet further state that the “key to supporting any rejection under 35 U.S.C. § 103 is the *clear articulation of the reason(s) why the claimed invention would have been obvious.*” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that “*the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.*” (*id.*). The Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that “[R]ejections on *obviousness cannot be sustained by mere conclusory statements*; instead, there *must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*” (*KSR*, 550 U.S. at ___, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Applicants respectfully submit that the *Office Action fails to provide any articulation, let alone, clear articulation of the reasons why the Applicants claimed invention would have been obvious.* For example, the *Examiner has not adequately supported the selection and combination*

of Strasnick '885, DeKimpe '682, and Berger '728 to render obvious Applicants' claimed invention. The Examiner's unsupported conclusory statements that "it would have been obvious to one of the ordinary skill in the art at the time of invention was made to incorporate DeKimpe or Berger's multi-dimensional user graphical interface" and "because Strasnick's multi-dimensional data hierarchy and drilling up and down the hierarchical structure and thus suggests drilling up and down multi-dimensional hierarchies including the three-dimensional layout of the hierarchical structures of displayed objects," *does not adequately provide clear articulation of the reasons why the Applicants claimed invention would have been obvious.* (29 May 2008 Final Office Action, Page 26). In addition, the Examiner's unsupported conclusory statement fails to meet any of the Guidelines rationales to render obvious the Applicants claimed invention.

Thus, if the Examiner continues to maintain the obvious rejection based on the proposed combination of Strasnick '885, DeKimpe '682, and Berger '728, *Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. § 103 as necessitated by the Guidelines, including an explicit analysis of the rationale relied upon by the Examiner.*

III. Applicants' Claims are Patentable over the Proposed Strasnick '885 – DeKimpe '682 – Berger '728 Combination

Applicants respectfully submit that independent Claims 55 and 63 are considered patentably distinguishable over the proposed combination of Strasnick '885, DeKimpe '682, or Berger '728 for at least the reasons discussed above in connection with independent Claim 47.

With respect to dependent Claims 48, 50-54, 56, 58-62, and 64-72: Claims 48, 50-54, 67, and 68 depend from independent Claim 47; Claims 56, 58-62, 69, and 70 depend from independent Claim 55; and Claims 64-66, 71, and 72 depend from independent Claim 63. As mentioned above, each of independent Claims 55 and 63 include limitations similar to those discussed above in connection with independent Claim 47. Thus, dependent Claims 48, 50-54, 56, 58-62, and 64-72 are considered patentably distinguishable over the proposed combination of Strasnick '885, DeKimpe '682, or Berger '728 for at least the reasons of depending from an allowable claim and are therefore considered to be in condition for allowance.

For at least the reasons set forth herein, the Applicants respectfully submit that Claims 47, 48, 50-56, and 58-72 are not rendered obvious by the proposed combination of Strasnick '885, DeKimpe '682, or Berger '728, or in knowledge generally available to those of ordinary skill in the art at the time of the invention, and are in condition for allowance. Thus, Applicants respectfully request that the rejection of Claims 47, 48, 50-56, and 58-72 under 35 U.S.C. § 103(a) be reconsidered and that Claims 47, 48, 50-56, and 58-72 be allowed.

CONCLUSION:

In view of the foregoing remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

A Request for Continued Examination (RCE) is being filed electronically herewith to facilitate the processing of this deposit account authorization. **The Director is hereby authorized to charge the \$810.00 RCE fee to Deposit Account No. 500777.** Although Applicants believe no additional fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777.** If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777.**

Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.

Respectfully submitted,

29 August 2008
Date

/Steven J. Laureanti/signed
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